CLAIMS

1. A method of preparing disodium 5’-guanylate heptahydrate crystals without using an organic solvent, the method comprising:

mixing an aqueous salt solution and an aqueous 5'-guanylic acid solution to form amorphous solids in a mixed solution such that the salt concentration in the mixed solution is 160 g/L to 360 g/L, and wherein the salt comprises NaCl; and

adding seed crystals to the mixed solution to form disodium 5'-guanylate heptahydrate crystals,

wherein the adding of the seed crystals is performed while maintaining the temperature at 25 °C to 45 °C.

~~2. The method of claim 1, wherein the salt concentration in the mixed solution is 160 g/L to 360 g/L.~~

~~3~~2. The method of claim 1, wherein the aqueous salt solution is at pH of 7 to 10.

~~4~~3. The method of claim 1, wherein the salt concentration in the aqueous salt solution is 200 g/L to 400 g/L.

~~5~~4. The method of claim 1, wherein the concentration of 5'-guanylic acid in the aqueous 5’-guanylic acid solution is 50 g/L to 400 g/L.

~~6~~5. The method of claim 1, wherein the aqueous 5’-guanylic acid solution comprises those obtained by microbial culture.

~~7~~6. The method of claim 1, wherein the seed crystals comprise disodium 5’-guanylate heptahydrate crystals.

~~8~~7. The method of claim 1, wherein the amount of the seed crystals added is 0.1 part by weight to 5.5 parts by weight based on 100 parts by weight of 5'-guanylate.

~~98~~. The method of claim 1, further comprising cooling a solution comprising the formed crystals after forming the disodium 5'-guanylate heptahydrate crystals.

~~109~~. The method of claim ~~98~~, wherein the cooling is performed at 25°C or lower.

~~11. The method of claim 1, wherein the salt comprises an alkaline metal salt.~~

~~12. The method of claim 1, wherein the salt comprises NaCl.~~